Docket No: NIC043-0001-100

Serial No. 10/666,163

§ 1.132 Affidavit of Orhan Tuncay, DMD



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Jonathan L. Nicozisis

Serial No.

10/666,163

Filed

September 19, 2003

Art Unit

3732

Examine

Ralph A. Lewis

Attorney Docket:

NIC043 - 230540PT1

Title:

APPARATUS AND METHOD FOR REMOVING A REMOVABLE TOOTH

POSITIONING APPLIANCE FROM THE TEETH OF A PATIENT

AFFIDAVIT OF DR. ORHAN C. TUNCAY, D.M.D. UNDER 37 C.F.R. § 1.132

- 1. I, Orhan C.Tuncay, am an individual residing at 334 South 3rd St., Philadelphia, PA, and am a citizen of the United States of America.
- 2. I have received the following dental-related education and/or have obtained the following dental-related degrees: (1) University of Ankara, School of Dentistry, received Dental Degree in 1969; (2) University of Pennsylvania, School of Dental medicine, studied as a special student from 1970-1971; (3) University of Pennsylvania, School of Dental Medicine, received a Certificate in Orthodontics in 1974; and (4) Temple University, School of Dentistry, received a Dental Degree in 1997.
- 3. I currently hold the following positions: (1) Professor & Chairman of the Department of Orthodontics at Temple University; (2) Founder & Editor-in-Chief for the Orthodontics & Craniofacial Research publication, published by Blackwell Munksgaard; (3) Founding Editor of the Progress in Orthodontics publication, published by Quintessence; (4) Founder & Editor of the Cases & Commentaries in Orthodontic Technology publication, published by Prof. Audience Comm.; and (5) Founder & Editor of the Clinical Reports & Techniques publication, published by Align Technology.
- 4. I am also a licensed orthodontist practicing at 1518 Walnut St. #500, Philadelphia, PA 19103 and at 333 S. Oxford Valley Rd. Suite 507, Fairless Hills, PA 19030.
- 5. My additional professional and/or academic credentials and accomplishments are set forth in my Curriculum Vitae, a copy of which is annexed hereto.
- 6. I have been practicing orthodontics for over 32 years. My practice of orthodontics has included the fitting, application, and prescription of removable tooth positioning appliances,

Docket No: NIC043-0001-100 Serial No. 10/666,163 § 1.132 Affidavit of Orhan Tuncay, DMD

such as the one disclosed in FIG. 1 of the present U.S. Patent Application (Serial No. 10/666,163), which are typically sold under the brand name Invisalign® since 1988.

- 7. Since I have been involved in the fitting, application, and prescription of removable tooth positioning appliances, there has been a need for an orthodontic tool and method that is suitable to remove these tooth positioning appliances from the teeth of patients. I, personally, have been aware of this need since 2000 and the need has been persistent. To the best of my knowledge, despite the existence and recognition of this need in the art, no orthodontic tool or method was developed prior to the present invention that satisfied this need.
- 8. I have reviewed and am familiar with the orthodontic tool, system, and method disclosed and claimed in United States Patent Application 10/666,163.
- 9. I have reviewed and am familiar with the orthodontic tool disclosed in United States Patent 2,602,998 ("Sprague"). The Sprague tool is not suitable for removing removable tooth positioning appliances. The Sprague tool is designed for use with the prosthetic dental devices, such as dentures, and for the removal of tartar. The sharp edge of the Sprague tool is designed to engage a hook/clasp of a prosthetic dental device. To the contrary, in order to remove a removable tooth positioning appliance, such as the Invisalign®, the sharp edge of the Sprague tool would have to be wedged between the removable tooth positioning appliance and the gums/teeth of the patient. This would present the danger of damaging the gums/teeth of the patient during the removal process. One skilled in the art would not use the Sprague tool to remove removable tooth positioning appliances and would not distribute the Sprague tool in combination with the removable tooth positioning appliance to patients for home use.
- 10. In accordance with the foregoing, the aforementioned long felt need is satisfied by the present invention of a dental system for positioning teeth comprising: a removable tooth positioning appliance for aligning teeth of a patient; and an apparatus comprising a handle portion, a member extending form the handle portion and having a distal end, and an engagement block having a tapered edge for engaging an edge of the tooth positioning appliance, the engagement block protruding from the working portion at or near the distal end.
- 11. In accordance with the foregoing, the aforementioned long felt need is satisfied by the present invention of a method of removing a removable tooth positioning appliance from teeth of a patient comprising: providing an apparatus having a handle portion, a member extending from the handle portion and having a distal end, and an engagement block having a tapered edge, the engagement block protruding from the member at or near the distal end; positioning the tapered edge of the member near an edge of the tooth positioning appliance; inserting the tapered edge between the tooth positioning appliance and the teeth of the patient; and exerting force to the handle portion thereby causing the tooth positioning to release from the teeth of the patient.
- 12. I, Orhan C. Tuncay, do hereby swear, affirm, and attest that all statements made in paragraphs 1-11 above are true and correct and that all statements made on information and belief are believed to be true, and further that these statements are made with the knowledge that

PATENT

Docket No: NIC043-0001-100

Serial No. 10/666,163

§ 1.132 Affidavit of Orhan Tuncay, DMD

willful false statements and the like are so made under the penalties of perjury, and that any false statements may jeopardize the validity of the present application or any patent issued thereon.

Date: Sept. 27, 2005

Dr. Orhan C. Tuncay, D.M.D

Curriculum Vitae of ORHAN C. TUNCAY

January, 2005

GENERAL INFORMATION

Current Positions Held:

Professor and Chairman, Department of Orthodontics - Temple

University

Founder & Editor-in-Chief, ORTHODONTICS & CRANIOFACIAL RESEARCH

Publisher: Blackwell Munksgaard

PROGRESS in ORTHODONTICS Founding Editor,

Publisher: Quintessence

Founder & Editor, CASES & COMMENTARIES IN ORTHODONTIC

TECHNOLOGY

Publisher: Prof Audience Comm

Founder & Editor, CLINICAL REPORTS & TECHNIQUES

Publisher: Align Technology

e-mail:

Office Address:

Temple University, School of Dentistry

7728

3223 N. Broad Street

OTUNCAY@DENTAL.TEMPLE.EDU Philadelphia, PA 19140-5096

Telephone: (215) 707-

Fax: (215) 707-

Editorial office(s) address:

210 W. Rittenhouse Sq,

Suite 405

Philadelphia, PA 19103

oct@rittenhouseortho.com

Telephone: (215) 985-9030

e-mail:

Practice Address:

1518 Walnut St, # 500 Philadelphia, PA 19102

Telephone: (215) 772-0775

Facsimile:

(215) 772-0732

<u>Curriculum Vitae</u>: **Orhan C. Tuncay Page 2 of 34**

e-mail:

oct@rittenhouseortho.com

Curriculum Vitae: Orhan C. Tuncay Page 3 of 34

Practice Address #2:

333 S. Oxford Valley Rd

Suite 507

Fairless Hills, PA 19030

Telephone: (215) 946-7700 (215) 946-7701

Facsimile:

e-mail:

oct@rittenhouseortho.com

Current Home Address:

334 So. 3rd St.

Philadelphia, PA 19106

Telephone: (215) 592-0123

Licenses:

4429, Kentucky

2511-89, Mississippi

DS-029412-R, Pennsylvania

Marital Status:

Married (Agnes Akiko Kan)

Citizenship:

U.S.

Language Proficiency:

English and Turkish

EDUCATION

School of Dentistry, Faculty of Medicine, University of Ankara, 1964-69

Dental Degree: Dis Hekimi (Dr. Med. Dent)

School of Dental Medicine, University of Pennsylvania, Special 1970-71

Student

1972-74

School of Dental Medicine, University of Pennsylvania, Certificate

Orthodontics

1994-97

School of Dentistry, Temple University, Dental Degree (DMD)

PROFESSIONAL EXPERIENCES

Intramural practice limited to orthodontics, University of Kentucky, 1974-87

College of Dentistry

Craniofacial Deformities Clinic, at Daniel Boone Clinic, Harlan 1985-87

Kentucky

1988-94	Intramural practice limited to orthodontics, University of Mississippi Medical Center
1989-94	Attending Dentist University Hospital, University of Mississippi Medical Center
1989-94	Craniofacial Clinic University Hospital, University of Mississippi Medical Center
2002-	Private practice of orthodontics
ACADEM	IC APPOINTMENTS
1971-73	Research Associate, School of Dental Medicine, Department of Biochemistry, University of Pennsylvania
1974-80	Assistant Professor in Orthodontics, University of Kentucky, College of Dentistry
1/77-4/77	Acting Chairman, Department of Orthodontics, University of Kentucky, College of Dentistry
1977-80	Associate Member in the Graduate Faculty, University of Kentucky
1977-87	Director, Undergraduate Orthodontic Program, University of Kentucky, College of Dentistry
1980-87	Associate Professor in Orthodontics, University of Kentucky, College of Dentistry
1980-87	Full member in the Graduate Faculty, University of Kentucky
1981-87	Director of Graduate Studies, University of Kentucky, College of Dentistry
1981-87	Director, Graduate Orthodontic Program, University of Kentucky, College of Dentistry
1981-87	Chairman, Department of Orthodontics, University of Kentucky
1985-87	Visiting Professor of Biochemistry, Department of Biochemistry, University of Pennsylvania, School of Dental Medicine

<u>Curriculum Vitae</u>: **Orhan C. Tuncay Page 5 of 34**

1988-94	Professor and Chairman, Dept. of Orthodontics, University of Mississippi Medical Center, School of Dentistry
1990-92	Director, Short-Term Training: Students in Health Professional Schools. T-35 DE07119, University of Mississippi
1994-	Professor and Chairman, Department of Orthodontics, Temple University School of Dentistry
1994-	Director of Graduate Program in Orthodontics, Temple University
1999-00	Professor and Chairman, Department of Orthodontics and the Division of Pediatric Dentistry. Temple University.

HONORS

2000	Honorary Member, Charles H. Tweed International Foundation
2001	The Orhan C. Tuncay Teaching Fellowship, AAO Foundation
2001	Fellow, College of Physicians of Philadelphia
2003	Keynote Speaker, Invisalign Summit

CONSULTING ACTIVITY

1980	St. Louis University, External Examiner
1982	NIH/NIDR Member, Project Site Team, Center for Oral Health Research, University of Pennsylvania
1983	NIH/NIDR External Reviewer, Oral Biology and Medicine Ad Hoc Study Section
1984	NIH/NIDR Member, Oral Biology and Medicine Ad Hoc Study Section
1985-	Consultant to Editorial Board, American Journal of Orthodontics
1986	St. Louis University, External Examiner
1983-87	Consultant, Kentucky Crippled Children's Program

1988-94	Consultant, State of Mississippi, Office of the Governor, Division of Medicaid
1994	Consultant for Outcomes Assessment, Postgraduate Orthodontics Program, Case Western Reserve University
1998	Ad Hoc Member, Study Section Institute for Liver and Kidney Diseases, NIH
2000	Ad Hoc member and consultatnt - AAOF Board of Trustees
2003	Member Initial Review Group NIH, SBIR/STTR
2003	Member Initial Review Group NIH, SBIR/STTR
2003 -	Scientific Advisory Board – BAS Medical
2002 -	Academic Advisory Board – Align Technology

CONTINUING EDUCATION COURSES GIVEN:

1976	"Orthodontic Auxilliary", University of Kentucky, Lexington, Kentucky
1977	"Management of the Child Orthodontic Patient", Lexington, Kentucky
1978	"Adult Orthodontics", Lexington, Kentucky
1979	"Orthodontic-Periodontic Relationships", Lexington, Kentucky
1980	"Periodontal Problems in Orthodontic Treatment", Lexington, Kentucky
1981	"Orthodontics for the General Practitioner", Lexington, Kentucky
1984	"Orthodontics for the General Practitioner", Lexington, Kentucky
1986	"Adult Orthodontics", F.Ili Foschi, Bologna, Italy
1987	"Orthodontic Diagnosis", F.lli Foschi, Bologna, Italy
1987	"Biomechanics of Orthodontic Treatment", Bologna, Italy
2001	"Evidence-based Pearls" University of Kentucky, Lexington, KY
2002	"Advances in Clinical Orthodontics" San Juan, Puerto Rico.

- 2004 Advances in technology and biotechnogy in orthodontics, MASO, Baltimore
- 2004 "Orthodontic Controversies" Northeast Dental Society, Ben Salem, PA
- 2005 "Update on Orthodontics" Temple University, Philadelphia, PA

ADVISING ACTIVITY

Masters' Thesis Committees:

- 1975 Electrical stimulation of osteogenesis in pathological bony defects. *Joseph D. Jacobs*
- 1975 Comparison of soft tissue and bony response to surgical correction of mandibular prognathism in different types of Class III skeletal malocclusions. *Bonnie Daniels-Wheatley*
- 1976 A cephalometric analysis of the anterior vertical, posterior vertical and antero-posterior dimensions of the human craniofacial complex. *Richard C. Allen*
- 1976 A comparison of anchorage loss between individual maxillary canine retraction and enmasse maxillary anterior teeth retraction. *Richard Resler*
- 1976 A quantification of maxillary arch perimeter change resulting from maxillary expansion. *Glen R. Malchow*
- 1977 A critical evaluation of the vertical changes associated with surgical intrusion of the maxillary segments for the correction of the skeletal anterior open bite. *William B. Daugherty*
- 1977 Effects of posterior depressing mechanotherapy on vertical and horizontal growth. *Robert H. Curtis*
- 1981 Gingival invaginations in extraction sites of orthodontic patients. *Amanda Rivera*
- 1982 Soft tissue profile changes occurring during orthodontic treatment. *Ralph K. Bair*

<u>Curriculum Vitae</u>: Orhan C. Tuncay Page 8 of 34

- 1986 A photoelastic model to study force systems generated with lingual appliances. *Charles A. Lindsey*
- 1986 Interstitial force generation by rabbit nasal septal cartilage in vitro.

 Jeffrey H. Lindsey
- 1995 An orthopantomographic study of the eruption of mandibular third molars.

 Paul Castella
- 1995 Validity of the prediction of dentoskeletal and soft tissue profile changes after mandibular setback and maxillary impaction osteotomies using a computerized cephalometric system. Olga-Elpis G. Kolokitha
- 1995 An application of a classical model of competitive business strategy to the orthodontic industry. *Diane Hughes*
- 2001 A Multicenter Outcomes Assessemt of Longitudinal Analysis of Five-yearold Patients with Unilateral Cleft Palate. *Wanda Flinn*
- 2000 The role of TGF β_1 and β_3 in calvarial bone cell differentiation. *Dimitra Charalambopoulou*
- 2001 UCLP Treatment in the Mixed-dentition Patients in Multiple Centers.

 Alberto Vargas
- 2001 The Effects of FGF₂ and BMP₄ on Prechondrogenic Mesenchymal Cells and Lymphoblastoid Cells as Related to Fibrodysplasia Ossificans Progressiva. *Thomas Kilareski*
- 2003 The role of filamin-A in osteoblast mechanotransduction. *Dr. Rita V. Taliwal*
- 2003 Integration of FGF and BMP signaling in chondrocyte differentiation. *Dr. Ousama El-Hillal*

<u>Curriculum Vitae</u>: **Orhan C. Tuncay Page 9 of 34**

<u>Supervised Masters' Theses</u>:

1978	Effects of phosphodiesterase inhibition on orthodontic tooth movement in cats. Samuel J. Burrow
1978	Macrophages as possible precursors for osteoclasts. Steven L. Cohen
1979	The effects of indomethacin on the rate of orthodontic tooth movement in cats. <i>A. Brent Chumbley</i>
1981	Stability of surgical mandibular advancement procedures in relation to the occlusal plane. <i>Nathaniel Ritter</i>
1981	Repair potential of tricalcium phosphate ceramic implants in alveolar dehiscences. Angel San Miguel
1981	The effects of indomethacin on the chemical mediators of bone resorption, in vitro. Edward Tipton
1981	The role of PGE2 in bone resorption during orthodontic tooth movement. <i>Jean-Paul Syssens</i> . St. Louis University
1982	In vitro bone resorbing capability of periodontal tissue extracts from the orthodontically treated teeth of rats. <i>Richard G. Kimmel</i>
1982	Short-term condylar cartilage response to horizontal and vertical mandibular displacement in growing rats. William B. Simpson
1983	The circulating monocyte as precursor to the osteoclast. Ronald O. Parsons
1983	Family similarites in craniofacial morphology. Douglas D. Durbin
1984	A critical evaluation of the vertical changes associated with surgical intrusion of the maxillary segments for the correction of the skeletal anterior open bite. <i>William B. Daugherty</i>
1985	Analysis of relapse in surgical advancement of rat mandibles: A pilot study to develop a low-cost animal model for the study of skeletal relapse. Jeffrey A. Bunkers
1985	The effects of diphenhydramine on orthodontic tooth movement. Robert D. Rust
1985	Excessive gingival display in the adolescent: An orthodontic approach to treatment. Charles A. Machemehl, III

1986	Repair strength of long bone defects implanted with demineralized bone powder. <i>Eric E. Huffman</i>
1995	Efficacy of collection methods. Lisa B. Valins
1995	Application of fractal analysis to assessment of alveolar bone architecture during tooth movement. Farshad A. Zaghi
1995	The effects of baking soda-containing detifrices on the retention and solubility of orthodontic cements. <i>Richard A. Kaye</i>
1996	Development of a low-cost three dimensional imaging system for orthodontic diagnosis and treatment planning. <i>Michiel J. Nuveen</i>
1996	Expression of genes associated with remodeling in the human gingival fibroblast subjected to ultrasonic perturbation. Jane L. Grosser
1996	The expression of Homeobox genes in chondrocytes subjected to physical perturbation. <i>Richard A. D'Avanzo</i>
1996	Apoptotic cell death in mechanically perturbed chondrocytes. <i>Aaron Milchman</i>
1996	The effects of ultrasound on cellular metabolism in human gingival fibroblasts. <i>Patricia A. Dunn</i>
1996	A clinical study of the effect of ultrasound application on the rate of tooth movement. Gerardo Guajardo
1997 ĸB in	The effects of IL-1 and physical perturbation on the expression of NF-osteoblasts and gingival fibroblasts in vitro. <i>Britt D. Vinson</i>
1997	Evaluation of type I, II, III, IX, and X collagen gene expression in the midpalatal suture during rapid expansion in the rat. <i>Lisa M. Banning</i>
1997	The effect of dihomo-gamma-linoleic acid (DGLA) on human gingival fibroblasts. Yakov S. Eisenberger
1997	Gene expression in human osteoblasts subjected to IL-1 and ultrasound perturbation in vitro. <i>Ali S. Husain</i> . Winner: MASO Kress Research Award.
1997	Financial business plan: Making the transition from residency to practice. James D. Riesenberger

<u>Curriculum Vitae</u>: Orhan C. Tuncay Page 11 of 34

- 1997 Correlation between mean standard craniofacial measurements and perception of good-looking faces of the Puerto Rican hispanic group. *Jose M. Hernandez Loring*
- 1997 Periodontal, cephalometric and esthetic outcomes of an inappropriate treatment plan. *Tracy R. Patterson*
- 1998 The curve of Spee effect on the stability of the corrected malocclusion. Kristin A. Thiry
- 1998 The influence of periosteum on the prolific characteristics of periodontal ligament fibroblasts in vitro. *Anne O'Day*
- 1998 The role of the p53 gene in the osteoblast response to physical perturbation. *Thao T. Le*
 - 3D image construction of the craniofacial complex. Can X. Nguyen
- 1998 The effect of ultrasound perturbation on the induction of vascular endothelial growth factor (VEGF) in primary cultures of endothelial cells, osteoblastic cells and gingival fibroblasts. *Kianoush M. Tari*Winner: **MASO** Kress Research Award
- 1999 A stochasic financial model to evaluate the value of the option to specialize in orthodontics. *Kevin J. Klatte*
- 1999 Localization of nitric oxide synthase in the periodontal tissues of orthodontically moved and stationary teeth. *Joseph M. Brogan*
- 1999 Defining characteristics of financially successful orthodontists. *Mathew J. Coats*
- 1999 Satisfaction of parents and orthodontists with orthodontic treatment outcome and care delivery. Susan M. Lempert
- 1999 Outcomes assessment of cleft lip and palate patients treated with infant presurgical orthopedics and gingivoperioplasty vs. primary soft tissue closure only. *Amy E. James*
- 1999 An exploratory study to ascertain if relaxin might modulate sutural and periodontal remodeling. *Jonathan L. Nicozisis*
- 2000 Internal marketing and novel clinical technique introduction effects on orthodontic practice growth. *Brian D. Amy*

- 2000 Development of the laser scan craniofacial imaging and animation system. John C. Slattery
- 2000 An exploratory study of oscillating physical perturbation effects on chick calvarial osteoblasts with a novel device to apply tensile forces. *Timothy M. Pierce*
- 2000 Osteoblast response to physical perturbation in the presence of alendronate sodium. *Tanya Stavisky*
- 2000 Does the institution where orthodontic education is received be the portent of success. *Gregory Garn*
- 2000 Maxillary expansion: A meta analysis. Patricia H. Schiffman
- 2001 A Comparison of Damon SL Brackets to Conventional Ligation Edgewise Brackets with Regard to Treatment Time, Treatment Outcome and Patient Satisfaction. *Jeffrey J. Eberting*
- 2001 Perception of Root Resorption on Stability and Long-term Prognosis. Kook S. Lee
- 2001 Temple Smile Index Development of an Esthetic Index for Objective Evaluation of Smile. *Won Woo Park*
- 2002 The effects of root charateristics and of the dentoalveolar architecture on root resorption. *Justin Sung-Ho Hong*
- 2002 What are the treatment related factors of external apical root resorption? A meta analysis. *Gady Ross Segal*
- 2002 Vertical growth contribution to molar correction in the Class II div 1 patient. Cuong Van Nguyen
- 2002 The effects of inappropriate extraction or non-extraction treatment: A quantitative assessment of a qualitative orthodontic result. *Michelle B. Brown*
- 2002 A qualitative assessment of orthodontic parents' perceptions of facial attractiveness and preferences following orthodontic treatment. *Christopher K. Smedley*
- 2002 The relationship between accepted standards of excellence in finished orthodontic cases and stability. *Richard M. Hennebry*

Curriculum Vitae: Orhan C. Tuncay
Page 13 of 34

2003 The intricacies of referral relationships between orthodontists and other specialists. Jason S. Bourne 2003 Computer animation of the smile and peri-oral soft tissue with the craniofacial imaging and automation system. Wilbert Saavedra 2003 Animation of the human smile with the craniofacial imaging and animation system. Robert Murray 2003 Integration of Invisalign ClinCheck models with the three dimensional image and animation of the human smile. David P. Lee facial 2004 2005 SERVICES IN PROFESSIONAL and SCIENTIFIC ORGANIZATIONS 1984 NIDR Member, Ad Hoc Study Section 1985-87 NRSA Senior Research Fellow, NIH 1990 Sponsor AADR Student Research Fellowship 1990 Medical Research Council of Canada, External Reviewer 1991 Secretary, Section on Orthodontics, AADS Workshop Leader & Panelist, AAO: Educators' Forum 1992 1992 Chairman-elect, Section on Orthodontics AADS Chairman, Section on Orthodontics AADS 1993 1993 President-elect, Mississippi Association of Orthodontists 1994 President, Mississippi Association of Orthodontists 1994 - 97 Councilor, Section on Orthodontics, AADS

Member, Board of Directors, Greater Philadelphia Society of

1994 -

Orthodontists

<u>Curriculum Vitae</u>: Orhan C. Tuncay Page 14 of 34

- 1995 Chairman, Scientific Program Commitee, Middle Atlantic Society of Orthodontists
- 1995 Member, Education and Research Committee, MASO

Member, AAO Council on Scientific Affairs (COSA)

Member, Study Section, Institute for Liver and Kidney Diseases -- NIH

1998 President-elect, Greater Philadelphia Society of Orthodontists

Chairman, Scientific Program, MASO/GLAO joint meeting, Bermuda

- 1999 President-elect, Craniofacial Biology Group, IADR / AADR
- 1999 President, Greater Philadelphia Society of Orthodontists (GPSO)
- 2000 Chairman, International Orthodontic Journal Editors' Symposium. The World Federation of Orthodontists.
- 2000 President, Craniofacial Biology Group, IADR / AADR
- 2000 American Association of Orthodontists Foundation (AAOF) Board of Directors
- 2001-02 Chairman, Council on Scientific Affairs (COSA)
- 2004 Chairman, Nominating Committee (MASO)

PROFESSIONAL ACTIVITY

Editorships:

- 2001 Editor Cases and Commentaries in Orthodontic Technology
- 1999 Editor-in-Chief, Progress in Orthodontics, official publication of SIDO
- 1997- Editor-in-Chief, Clinical Orthodontics and Research
- 2000 Associate Editor, Odontology (Nippon University Japan)
- 1997- Member, *Editorial Board*, Türk Ortodonti Dergisi (Turkish Journal of Orthodontics)
- 1997- Member, *International Editorial Board*, Hellenic Orthodontic Review (Official Publication of the Greek Orthodontic Society)

<u>Curriculum Vitae</u>: Orhan C. Tuncay Page 15 of 34

- 1985 Editorial Consultant to American Journal of Orthodontics and Dentofacial Orthopedics
- 2001 Editorial Consultant to Angle Orthodontist
- 2005 Editor Case Reports & Techniques in Invisalign

SPEAKING ENGAGEMENTS (Invited lectures only)

International:

- 1975 University of Ankara, Ankara, Turkey, "Orthodontics, 1975"
- 1980 Istanbul University, Istanbul, Turkey, "Orthodontic tooth movement as an adjunct in general dentistry"
- 1980 Istanbul University, Istanbul, Turkey, "Recent research and clinical advances in orthodontics"
- 1980 Aegean University, Izmir, Turkey, "Orthodontic tooth movement as an adjunct in general dentistry"
- 1980 Aegean University, Izmir, Turkey, "Recent research and clinical advances in orthodontics"
- 1982 Welsh National School of Medicine, University of Wales Dental School, Cardiff, England, "Adjunctive Orthodontics"
- 1982 Welsh National School of Medicine, University of Wales; Department of Orthodontics, Cardiff, England, "Biochemical mechanisms of bone remodeling"
- 1982 Istanbul University, Istanbul, Turkey, "An update in Orthodontic Education"
- 1987 Marmara University, Istanbul, Turkey, "Current Orthodontic Practices"
- 1987 Associazione Italiana Odontoiatri, Milano, Italy "Periodontal Biology of Tooth Movement"
- 1987 Bologna University, Bologna, Italy, "Remodeling of Periodontium"
- 1992 University of Toronto, Toronto, Canada, "A Possible Role for Vascularity in Tooth Movement"

- 1995 Aristotle University, Thessaloniki, Greece "Research and Novel Knowledge at Temple"
- 1996 VI International Symposium on Dentofacial Development and Function, Athens, Greece, "Ultrasound Stimulation of Remodeling in Periodontal Tissues"
- 1997 Expodental 97, Turkish Dental Association, Istanbul, Turkey "Adjunctive Orthodontics and recent developments in radiographic imaging."
- 1997 Aristotle University, Thessaloniki, Greece "Current Research findings at Temple"
- 1997 Orthodontic Society of Northern Greece. "Novel Diagnostic, Therapeutic and Practice Management Techniques"
- 1998 AAO Patient Care & Management / Practice Transition Conference, Chicago, IL "Why do you have patients? Effective and ineffective marketing strategies"
- 1998 6th International Orthodontic Conference, Turkish Orthodontic Society, Istanbul, Turkey. "The use of ultrasound as potential adjunct in orthodontic tooth meovement"
- 1998 International Orthodontic Conference, Turkish Orthodontic Society, Istanbul, Turkey. "The role and responsibilty of professional journals and societies in the conduct of ethical research"
- 1999 International congress of SIDO. Rome, Italy. "Three dimensional imaging systems for the craniofacial complex"
- 1999 Humbolt University, Berlin, Germany. Three dimensional imaging and diagnosis
- 2000 Royal Dental College, Aarhus, Denmark. Development of sytems for the three dimensional imaging of the craniofacial complex
- 2000 University of Padova, Padova, Italy. 3D imaging of the craniofacial complex.
- 2000 Societa Italiana di Ortodonzia. Genoa, Italy. Motion animation of the human craniofacial complex
- 2001 Osaka University, Japan. Evidence-based orthodontics

- 2002 Athens, Greece International Conference on Orthodontic Journals. "Author, Editor, Reader Triumvirate."
- 2002 Athens, Greece Fourth International Symposium of the Greek Orthodontic Society. "3D Imaging and Motion Animation."
- 2002 Thessaloniki, Greece Artistotle University and Northern Greece Orthodontic Society. "Advances in Clinical Orthodontics."
- 2002 Moscow, Russia Russian Orthodontic Congress. "Evidence and esthetics 3D assessment."
- 2003 Ferrara, Italy New Frontiers in Orthodontics, University of Ferrara. "Evidence-based orthodontic practice: new concepts and tools for orthodontic treatment."
- 2003 Ferrara, Italy New Frontiers in Orthodontics, University of Ferrara. "Literature review."
- 2004 Amsterdam, The Netherlands North Atlantic Component "3D motion animation of the human face"
- 2004 Berlin, Germany 1st European Symposium in Clinical Orthodontics "3D motion animation fo the human face."

National:

- 1972 Middle Atlantic Society of Orthodontists, Phildelphia, "Lead levels of human deciduous and permanent teeth"
- 1972 Summer research seminars, University of Pennsylvania, Philadelphia, "Analytical problems of calcified tissues"
- 1977 Conference of Orthodontic Educators, St. Louis, "Adult orthodontics for the general practitioner"
- 1979 University of Pennsylvania, School of Dental Medicine, Philadelphia, "Effects of diazepam on tooth movement in cats"
- 1980 Baylor University, School of Dentistry, Dallas, Texas "Bone remodelling during tooth movement and growth of the craniofacial complex"
- 1980 The Carl O. Boucher Prosthodontic Conference, Columbus, Ohio, "Adjunctive orthodontics in prosthetic therapy"
- 1980 The Carl O. Boucher Prosthodontic Conference, Columbus, Ohio,
 "Cephalometric evaluation of the skeletal changes in denture patients 10 year follow-up study"
- 1980 The Academy of Denture Prosthetics, Daytona Beach, "Cephalometric evaluation of the skeletal changes in denture patients 10 year follow-up study"
- 1980 Green River Dental Society, Owensboro, Kentucky, Periodontic-Orthodontic Interactions"
- 1980 Indiana University, Department of Orthodontics, Indianapolis, Indiana, "Bone Resorption during Orthodontic Tooth Movement"
- 1981 American Association of Endodontists, Clinical Essayist, Philadelphia, "Endodontic-Orthodontic Interactions"
- 1983 University of Kentucky, Lexington, Kentucky, "Aging of the Craniofacial Complex"
- 1984 University of Michigan, Ann Arbor, "Biology of Tooth Movement"
- 1984 University of Michigan, Ann Arbor, "Cellular aspects of bone remodelling"
- 1985 University of Kentucky, Lexington Kentucky, "Tissue Responses to Orthodontic Tooth Movement" Regional AADR Meeting

- 1986 University of Michigan, Ann Arbor, "Findings of Recent Studies on Calcified Tissues"
- 1986 University of Pennsylvania, Philadelphia, Moderator: "Symposium on Orthodontics"
- 1986 Columbia University, New York, "Tissue Response to Orthodontic Tooth Movement"
- 1986 University of Connecticut, Farmington "Cellular Energy Metabolism in Calcification" Symposium on Biology of Tooth Movement.
- 1987 Emory University, Atlanta, "Energy Metabolism in Skeletal Tissues"
- 1987 Case Western Reserve University, Cleveland, "Energy Metabolism in Calcified Structures"
- 1988 Jackson Dental Study Club "Research and Issues in Orthodontics"
- 1989 University of Kentucky, Lexington, "Mechanical Stimuli on Calcified Tissues"
- 1989 University of Louisville, Louisville, "Periodontal Response to Orthodontic Tooth-Movement"
- 1989 University of Mississippi Department of Physiology and Biophysics, "Possible Role for Oxidative Metabolism in Bone Remodeling"
- 1989 Mississippi Dental Association, Biloxi, "Adjunctive Orthodontics"
- 1990 New York University, New York, "Bone Remodeling Under Mechanical Forces"
- 1990 Temple University, Philadelphia, "Periodontal Response to Tooth Movement"
- 1990 University of Tennessee, Memphis, "Mechanisms of Periodontal Remodeling During Tooth Movement"
- 1991 University of Alabama, Birmingham, "Review of Methods that Study Class II Correction"
- 1991 St. Louis University, St. Louis, "Role of Oxygen Tension in Periodontal Remodeling"

- 1991 Jackson Dental Study Club "Reporting of Clinical Studies"
- 1993 University of California, San Francisco "On the Nature of Clinical Information for the Clinicians"
- 1993 University of Mississippi, Jackson "Reports of Clinical Studies"
- 1993 Temple University, Philadelphia, "Caveats in Clinical Studies of Growth Modification"
- 1994 Case Western Reserve University, Cleveland, "New Perspectives in Orthodontic Treatment"
- 1996 Edgewise Orthodontic Society, Cincinnati, "Bone Growth Clinical Applications"
- 1996 University of Pennsylvania, Philadelphia, "Possible Mechanisms of Periodontal Remodeling"
- 1997 American Association of Orthodontists, annual session, "Ultrasound as a potential adjuct in tooth movement"
- 1997 American Association of Orthodontists, annual session, "Effective and Ineffective Marketing"
- 1997 Middle Atlantic Society of Orthodontists (MASO), "The State of Research at Temple"
- 1997 Greater Philadelphia Society of Orthodontists (GPSO), Session Moderator.
- 1998 AAO / COOP Patient Care & Management and Practice Transition Conference. "Why do you have patients" Chicago
- 1998 AADS Section on Orthodontics "Development of a 3D imaging system"
- 1998 Baylor College of Dentistry, Dept of Orthodontics. "Effective Marketing Strategies"
- 1998 AAO Annual Session. "Imaging the Human Craniofacial Complex", Dallas, Tx
- 2000 University of the Pacific. "Studies of three dimensional imaging of the human craniofacial complex"
- 2000 University of California at San Francisco. "Recent advances in orthodontic research"

- 2000 University of Pennsylvania, Department of Biochemistry. "3D imaging of the human craniofacial complex"
- 2000 University of Pennsylvania, Orthodontic Study Club "Development of a 3D imaging system"
- 2000 Charles H. Tweed Foundation, Washington, DC. "3D imaging in orthodontic diagnosis and treatment planning."
- 2001 AAO Annual session. 3D imaging and motion animation of the craniofacial complex. Toronto
- 2001 University of Kentucky, Evidence-based Orthodontics. Graduation speaker.
- 2002 Moyers Symposium, Ann Arbor University oif Michigan. "Three-dimensional motion animation of dentofacial structures."
- 2002 University of Texas. Houston. "3D Motion Animation of the Human Face."
- 2002 University of Pennsylvania. "New perspectives in the biology of tooth movement."
- 2002 University of Texas. Houston. "Biologic principles of orthodontic tooth movement."
- 2003 Moyers pre-symposium, Ann Arbor, University of Michigan. "Chronicle of experiences with Invisalign"
- 2003 Symposium to honor Dr, Lysle E. Johnston, Jr., Ann Arbor, University of Michigan. "Orthodontics is biology-based specialty"
- 2003 Invisalign Summit, Las Vegas, NV. The keynote address.
- 2005 AAO Annual session. Planning of Dental and Facial Esthetics by Invisalign® Technology. San Fracncisco, CA
- 2005 Invisalign Summit, Las Vegas NV. Orthodontic Office Design.

Curriculum Vitae: Orhan C. Tuncay Page 22 of 34

PUBLICATIONS

Journals:

- 1. Needleman H, Tuncay OC, and Shapiro IM: Lead levels in deciduous teeth of urban and suburban children. *Nature*, 235:111-112, 1972
- 2. 2.Carroll KG, Needleman HL, Tuncay OC, and Shapiro IM: The distribution of lead in human deciduous teeth. *Experientia*, 28:434, 1972
- 3. Shapiro IM, Needleman HL, and Tuncay OC: The lead content of human deciduous and permanent teeth. *Environmental Research*, 5:467-470,1972
- 4. Shapiro IM, Cohen G, Needleman HL, and Tuncay OC: The presence of lead in toothpaste. *JADA*, 86:394-395, 1973
- 5. Shapiro IM, Dobkin B, Tuncay OC, and Needleman HL: Lead levels in dentine and circumpupal dentine of deciduous teeth of normal and lead poisoned children. *Clinica Chemica Acta*, 46:119-123, 1973
- 6. Tuncay OC and Biggerstaff RH: Orthodontic Classifications: Mystique or Reality? *Am J Orthod*, 70:173-178, 1976
- 7. Biggerstaff RH and Tuncay OC: A dynamic evaluation of human occlusion. *Am J Orthod*, 70:316-324, 1976
- 8. Biggerstaff RH, Allen RC, Tuncay OC, and Berkowitz J: The vertical cephalometric analysis of the human craniofacial complex. *Am J Orthod* 72:397-405, 1977
- 9. Tuncay OC, Biggerstaff RH, Cutcliffe JE, and Berkowitz J: The use of the T-loops in uprighting molars. *JADA*, 100:863-866, 1980
- 10. Tuncay OC, et al: The use of T-loops in uprighting molars. *Oral Health*, 71:45-48, 1981. (Reprinted from JADA, 100:863, 1980)
- 11. Tuncay OC, et al: The use of T-loops in uprighting molars. *Illinois Dental Journal* (1982). (Reprinted from JADA, 100:863,1980)
- 12. Tuncay OC: Orthodontic tooth movement as an adjunct to prosthetic therapy. *J Prosthet Dent*, 46:41-47, 1981
- 13. Tuncay OC, et al: Mandibular Prognathism in Edentulous Patients a factor of skeletal pattern. *Special Care*, 2:165-166, 1982

- 14. Tuncay OC and Cunningham C: T-loop appliance in endodontic-orthodontic interactions. *J Endodont*, 8:367-369, 1982
- 15. Tuncay OC, Abadi B, and Ellinger C: Cephalometric evaluation of the changes in denture patients-10 year follow-up study. *J Prosth Dent*, 51:169-180, 1984
- 16. Burrow SJ, Sammon PJ, and Tuncay OC: The effects of diazepam (Valium) on orthodontic tooth movement and alveolar bone cAMP levels. Am J Orthod Dentofac Orthop, 90:102-105, 1986
- 17. Chumbley AB and Tuncay OC: The effect of indomethacin (An aspirin-like drug) on the rate of orthodontic tooth movement. *Am J Orthod Dentofac Orthop*, 89:312-314, 1986
- 18. Tuncay OC and Killiany DM: The effect of gingival fiberotomy on the rate of tooth movement. *Am J Orthod Dentofac Orthop*, 89:212-215, 1986
- 19. Shapiro IM, Golub EE, Chance B, Piddington C, Oshima O, Tuncay OC, and Haselgrove JC: Linkage between energy status of perivascular cells and mineralization of the chick growth cartilage. *Developmental Biology*, 129:372-379, 1988
- 20. Tulloch JFC, Antzack AA, and Tuncay OCT. Review of clinical research in orthodontics. *Am J Orthod Dentofac Orthop*, 95:499-504, 1989
- 21. Tuncay OC, Haselgrove JC, Frasca P, Piddington C and Shapiro IM: Scanning microfluorimetric measurements of redox status in the rat dentoalveolar tissues. *Archs Oral Biol*, 35:(2)113-118, 1990
- 22. Tuncay OC and Villa G: [Perche non si riesce a muovere ortodonticamente un dente anchilosato?] If bone cells respond to pressure and tension why an ankylosed tooth cannot be moved orthodontically? *Mondo Ortodontico*, 15:475-480, 1990
- 23. Tulloch JFC, Medland W and Tuncay OC: Methods used to evaluate growth modification in Class II malocclusion. *Am J Orthod Dentofac Orthop*, 98:340-347, 1990
- 24. Tuncay OC and Roberson J: Referral of orthodontic patients for orthodontic treatment. Dentistry 11(2):26-27, 1991
- 25. Tuncay OC and Tulloch JFC: Apparatus Criticus: Methods used to evaluate growth modification in Class II malocclusion. *Am J Orthod Orthodofac Orthop*, 102(6):531-536, 1992

- 26. Holmes J, Barker MK, Walley EK and Tuncay OC: Cytotoxicity of orthodontic elastics. *Am J Orthod Dentofac Orthop*, 104(2):188-91, 1993
- 27. Atkins SE and Tuncay OC: Tooth brushing induced changes of blood flow in human gingiva. *Miss Dent Assoc Journal*, 49(2):27-29, 1993
- 28. Tuncay OC: Unorthodox approaches to health care. *Am J Orthod Dentofac Orthop*, 104(6):611-613, 1993
- 29. Tuncay OC, Ho D and Barker MK: Oxygen Tension Regulates Osteoblast Function. *Am J Orthod Dentofac Orthop*, 105(5):457-63, 1994
- 30. Rushing SE, Silberman SL, Meydrech EF and Tuncay OC: Dentists' Perception of Orthodontic Extraction Effects on Facial Appearance. *JADA* 126(6):769-772, 1995
- 31. Tuncay OC and Reeves GA: A "Patient" Patient -- 22 years in bands. *Am J Orthod Dentofac Orthop* 108(6):571-574, 1995
- 32. Tuncay OC: <u>Invited Editorial</u> "A look at implants from an orthodontic perspective" *Implant Dentistry*, pp2, 1995
- 33. Tewari M, Tuncay OC, Milchman A, Reddy JP, Reddy CD, Cressman DE, Taub R, Newton RC, and Tewari DS: Association of IL-1 Induced NF(B DNA-binding Activity with Collagenase Gene Expression in Human Gingival Fibroblasts. *Archs Oral Biol* 41(5):461-468,1996
- 34. Kolokitha OEG, Athanasiou AE and Tuncay OC: Validity of the Prediction of Dentoskeletal and Soft Tissue Profile Changes After Mandibular Setback and Maxillary Impaction Osteotomies Using a Computerized Cephalometric System. *Int J Adult Orthod Orthognathic Surg* 11(2):137-154, 1996
- 35. Hughes D, Landay M, Straja S and Tuncay O: Application of a Classical Model of Competitive Business Strategy to the Orthodontic Industry. *Am J Orthod Dentofac Orthop* 110(4):405-9, 1996
- 36. Tewari M, Tuncay OC, Tewari DS. Role of cytokines in periodontal diseases. *Diamond* 1996;5:30-2
- 37. Valins L, Straja S, Tuncay OC: Efficacy of Collection Methods in Orthodontic Practices. *J Clin Orthod*. 31(2):103-104, 1997
- 38. Eisenberger YS, Tuncay OC: Lip reading: Characteristics of Soft Tissues Hold Diagnostic Clues for the Van Der Woude Syndrome. *Case Studies in Orthodontics*, Vol 1, No 3,1997

- 39. Reddy PJ, Tewari M, Hamid QA, Whitaker E, Mauviel A, Reddy CD, Newton, RC, Taub R, Tuncay OC, Tewari DS: Inhibition of gingival collagenase gene expression by dexamethasone. *P.S.E.M.B.* 1998;218:1-6
- 40. Tewari M, Hamid QA, Tuncay OC Tewari DS. Antizyme prevents ornithine decarboxylase mediated cell death in human fibroblasts. *Oral Oncology* 1998:4:538-42
- 41. Tuncay OC. Why a new journal? Clin Orthod Res 1998;1:1
- 42. Castella P, Albright RH, Straja S, Tuncay OC: Prediction of third molar impaction in the orthodontic patient from a panoramic radiograph. *Clin Orth Res* 1998;1:37-43
- 43 Knight JM, Tuncay OC. Case report: Composite hooks in rotational control. *Clin Orth Res* 1998;1:68-70
- 44. Tuncay OC. The appropriateness of methods for clinical research *Clin Orthod Res* 1998;1:2
- 45. Walley EK, Silberman SL, Tuncay OC. Patient and parent preferences for orthodontic practices. *Clin Orthod Res* 1999;2:110-23.
- 46. Tuncay OC. Ethical research: who's responsibility is it? Clin Orthod Res 1999:2:1
- 47. Tuncay OC. The struggle between thinking and doing. *Clin Orthod Res* 1999;2:3
- 48. Tuncay OC. Imparting clinical wisdom. Clin Orthod Res 1999;2:2
- 49. Tuncay OC. Is the demise of publishing in sight? *Clin Orthod Res* 1999;2:4
- 50. Patterson TR, Straja SR, Tuncay OC. Outcomes of an inappropriate orthodontic treatment plan A case series study. *Prog Orthod* 2000;1:37-42.
- 51. Tuncay OC. Italian Orthodontics. Prog Orthod 2000; Inaugural Issue
- 52. Nguyen C, Nissanov J, Ozturk C, Nuveen M, Tuncay OC. Three-dimensional imaging of the craniofacial complex. *Clin Orthod Res* 2000;1: 46-50

- 53. Coats M, Straja S, Tuncay OC. The defining characteristics of financially successful orthodontists. *Am J Orthod Dentofac Orthop* 2000;118:18-23
- 54. Kula K, Glaros A, Larson B, Tuncay OC. Reasons that orthodontic faculty teach and leave teaching: a survey. *J Dent Educ* 2000;64:755-762
- 55. Tuncay OC. Orthodontic research directions. Clin Orthod Res 2000;3:1
- 56. Hamid QA, Reddy PJ, Tewari M, Uematsu S, Tuncay OC, Tewari DS. Regulation of IL-1 induced gingival collagenase gene expression by activator protein-1 (c-Fos/c-Jun) *Cytokine* 2000;12(11):1609-1619
- 57. Tuncay OC. Symbiosis. Clin Orthod Res 2000;3:3
- 58. Nicozisis J, Nah HD, Tuncay OC. Relaxin affects the dentofacial sutural tissues. *Clin Orthod Res* 2000;3:192-201
- 59. Tuncay OC, Nuveen MJ, Nguyen CX, Slattery JC. The development of a system for three-dimensional imaging and animation of the craniofacial complex. *Ortognatodonzia Italiana* 2000;9(3):331-337
- 60. Tuncay OC. The American perspective: Orthodontics the first specialty of dentistry is the first to disappear. *Clin Orthod Res* 2001;4:170-3
- 61. Tuncay OC. The American perspective: Orthodontics the first specialty of dentistry is the first to disappear. Reprinted in Canadian Association of Orthodontists News from Clin Orthod Res 2001;4:170-3
- 62. Schiffman PH, OC Tuncay. Maxillary Expansion: a meta analysis. *Clin Orthod Res* 2001;4:86-96
- 63. Tuncay OC. The American perspective part II. Strategies for the survival of the species. *Clin Orthod Res* 2001;4:63-64
- 64. Tuncay OC. The American perspective part II. Strategies for the survival of the species. Reprinted in Canadian Association of Orthodontists News from Clin Orthod Res 2001;4:63-64
- 65. Tuncay OC. Time might have come for the ABO to reinvent itself. *Clin Orthod Res* 2001;4:127-9
- 66. Tuncay OC. Three-dimensional imaging in orthodontic diagnosis and prediction of treatment outcome. *Semin Orthod* 2001;7(3):172-181

<u>Curriculum Vitae</u>: Orhan C. Tuncay Page 27 of 34

- 67. Lempert SM, DuCette J, Straja SR, Bray RJ, Albright RH, Tuncay OC. Satisfaction of parents and orthodontists with the delivery of orthodontic care and treatment outcome. *Prog Orthod* 2002;3:22-28
- 68. Brogan JM, Kang KJ, Koyama E, Tuncay OC. Localization of nitric oxide synthase in the periodontal tissues of orthodontically moved and stationary teeth. *Prog Orthod* 2002;3:12-16
- 69. Tuncay OC. How to measure success? Prog Orthod 2002;3:1
- 70. Eberting JJ, Straja SR, Tuncay OC. Teatment time, outcome, and patient satisfaction comparisons of Damon and convetional brackets. *Clin Orthod Res* 2002;4:228-34
- 71. Tuncay OC. Judgment of excellence in scholarship. *Orthod Craniofac Res* 2002;5:1
- 72. Tuncay OC. [Esthetics: Diagnosis and treatment planning in the new millennium.] *Russian Journal of Orthodontics* 2002:24-32.
- 73. Tuncay OC. Reader, author, editor triumvirate. *Hellenic Orthod J* 2003;3:Suppl pp.13-14.
- 74. Tuncay OC. What do journals do? Prog Orthod 2003;3:1
- 75. Lee KS, Straja SR, Tuncay OC. Perception of root resorption. *Orthod Craniofac Res* 2003 Aug;6:177-91
- 76. Straja SR, Klatte KJ, Montgomery GL, Tuncay OC. A stochastic evaluation of the decision to specialize in orthodontics. *Orthod Craniofac Res* 2003:6:20-31
- 77. Tuncay OC. Michael Melnick. Orthod Craniofac Res 2003;6:1
- 78. Tuncay OC. Conflict of interest. Orthod Craniofac Res 2003;6:73
- 79. Tuncay OC. Progress in Orthodontics matures. Prog Orthod 2003;5:1
- 80. Tuncay OC. Anniversary. Orthod Craniofac Res 2003;6:193
- 81. Tuncay OC. Giving is serious business. Orthod Craniofac Res 2004;7:1
- 82. Segal GR, Schiffman PH, Tuncay OC. Meta analysis of root resorption. *Orthod Craniofac Res* 2004;7:71-78
- 83. Tuncay OC. Expertise and experience. Orthod Craniofac Res 2004;7:63

- 84. Otis LL, Hong JSH, Tuncay OC. Bone structure effect on root resorption. *Orthod Craniofac Res* 2004;7:165-177
- 85. Tuncay OC. Taking stock: Hippocratic and Platonic thoughts on orthodontic tooth movement. *Orthod Craniofac Res* 2004;7:162-4
- 86. Tuncay OC. Bedeutung von 3-D-Animationen in der Kieferorthoädie. *Kieferorthoädie* 18:219-20, 2004
- 87. What price education? Orthod Craniofac Res 2005;8:1
- 88. How best to time education. Orthod Craniofac Res 2005;8:53

Books:

Tulloch, J.F.C. and Tuncay, O.C.: An Orthodontic Appliance Manual, The University of Kentucky Bookstore Press©, 1981

Tuncay, OC: The Invisalign System. Quintessence. In Press for January 2006.

Book Chapters:

- 1. Tuncay, O.C.: "Orthodontic guidelines in occlusal therapy", in Advances in Occlusion, Ed H. Lundeen, C. Gibbs, and John Wright. P.S.G., Inc., Bristol, England, 1982
- 2. Tuncay, O.C. and Shapiro, I.M.: "A possible role for hypoxia in cellular energy metabolism of calcified tissues", in Biology of Tooth Movement, Ed. L. Norton & C. Burstone. CRC press, Boca Raton, FL., 1988.
- 3. Tulloch JFC, Medland W and Tuncay OC: "Methods used to evaluate growth modification in Class II malocclusion", in Mosby Yearbook of Dentistry, The CV Mosby Co, St Louis, MO, 1992 (Reprinted from Am J Orthod Dentofac Orthop 98:340-347,1990)
- 4. Tuncay OC: Periodontal responses to orthodontic tooth movement. Proceedings of symposium Istanbul, Turkish Journal of Orthodontics, 1998.

5. Tuncay OC, Slattery JC, Nuveen MJ, Nguyen CX, DeFelice G, Resnick J. Three-dimensional Motion Animation of the Human Dentofacial Structures. University of Michigan Press. Monograph No. 40. pp133-166, Ann Arbor, 2003.

Editorials:

- 1. Cases and Commentaries in Orthodontic Technology, Issue No. 1
- 2. Cases and Commentaries in Orthodontic Technology, Issue No. 2
- 3. Cases and Commentaries in Orthodontic Technology, Issue No. 3
- 4. Cases and Commentaries in Orthodontic Technology, Issue No. 4
- 5. Cases and Commantaries in Orthodontic Technology, Issue No. 5
- 6. Cases and Commantaries in Orthodontic Technology, Issue No. 6
- 7. Possiblities. Clinical Reports & Technology 2005;1:1
- 8. Facsimile Clinical Reports & Technology 2005;1:2

Others:

Tuncay OC et al., Letter to the Editor, "Orthodontic Extraction" Authors' response, *JADA* 126:1338, 1995

Tuncay OC, Nuveen MJ, Nguyen CX, Slattery JC.: The development of a system for three-dimensional imaging and animation of the craniofacial complex. GPSO Newsletter, 2000.

Interview with Dr. Orhan C. Tuncay. Kieferorthopaedie 2000;14:301-305

Interview with Dr. Orhan C. Tuncay. Hellenic Orthodontic Review 2004;7:1-8

Curriculum Vitae: Orhan C. Tuncay Page 30 of 34

Tuncay OC, Miethke RR, Takada K, Jones ML, Turpin DL, Miotti FA, Lee B, Park YG, Isaacson RJ, White LWA. Précis of the Proceedings of the First International Orthodontic Editors' Symposium.

Published in:

Aust J Orthod July 2000

Kieferorthopaedie September 2000;14:229-

230

Angle Orthod 2000;70(5):409-10 Clin Orthod Res 2000;3:4 Prog Orthod 2001;2:1-4 J Orthod 2001;27(4):335-336 Hellenic Orthod Rev 2000;3:97-101

Tuncay OC. Orthodontics...the first specialty will be the first to disappear. *MASO Newsletter*, Autumn 2000

Schiffman PH, Tuncay OC. Metaánalisis de la expansión maxilar. *Acta Dental Internacional* 2001;2:323-331

Tuncay OC. Giving is serious business. AAO Foundation Awards Update 2004 Edition. Reprinted from: *Orthod Craniofac Res* 2004;7:1

Tuncay OC. The Clear Way. Orthodontic Products October 2004

Tuncay OC. How to Treat Adults. Orthodontic Products September 2005

Abstracts:

- Tuncay, O.C.*, Needleman, H., & Shapiro, I.: The use of primary teeth in the diagnosis of plumbism. *IADR program and abstracts of papers* (50th General Session), 1972
- Tuncay, O.C.* and Shapiro, I.: The presence of lead in toothpaste. *J Dent Res* 52. Special Issue, 1973
- Roberts, D. & Tuncay, O.C.*: Variation in the SNA angle in orthodontic patients with symptoms of TMJ dysfunction. *J Dent Res* Vol. 53, Special Issue, 1974
- Burrow, S.J.*, Sammon, P.J., & Tuncay, O.C.: Effects of phosphodiesterase inhibition on orthodontic tooth movement in cats. *J Dent Res* Vol. 57, Special Issue, 1978

- Chumbley, A.B.* and Tuncay, O.C.: The effects of Indomethacin on the rate of tooth movement in cats. *J Dent Res* 1982. Vol. 60, Special Issue, 1981
- Tuncay, O.C.*, et al.: Ten year longitudinal cephalometric evaluation of patients wearing complete dentures. *J Prosthet Dent* Vol. 60, Special Issue, 1981
- Tuncay, O.C., et al.: Ten year longitudinal cephalometric evaluation of patients wearing complete dentures. *J Prosthet Dent* 1982. (Reprinted from J. Dent. Res.)
- Tuncay, O.C.* and Killiany, D.M.: The effect of CFR on the rate of tooth movement. *J Dent Res* 63:335, Special Issue, 1984
- Marshall, D.E. and Tuncay, O.C.*: Organic and inorganic osseous implants in cranial defects. *J Dent Res* Special Issue, 1985
- Killiany, D.M.* and Tuncay, O.C.: Longitudinal assessments of periostomy and condylar growth in the Rat. *J Dent Res*, Special Issue, 1985
- Tuncay, O.C.* and Shapiro, I.M.: Glucose metabolism in chick growth cartilage. *J Dent Res*, Special Issue, 1987
- Lindsey, H.J., Sammon, P.J., Tuncay, O.C. and Killiany, D.M.*: Force generation by nasal septal cartilage in vitro. J Dent Res 13 Special Issue, 1987
- Tuncay, O.C.*, Shapiro, I.M., and Haselgrove, J.C.: Microfluorimetric analysis of oxidative metabolism in periodontal tissues. *J Dent Res*, Special Issue 1987
- Tuncay, O.C.*, Neuman, G. and Shapiro, IM: Chondrocyte response to tensed and stretched substratum. *Calcif Tiss Intl* 44:1989 (suppl)
- Tulloch, J.F.C.*, Medland, Wm and Tuncay, O.C.: A review of methods used to study Class II treatment effects. *J Dent Res*, Special Issue, 1989
- Tuncay, O.C.* and Shapiro, I.M. Compression and tension effects on chondrocytes. *J Dent Res*, Special Issue, 1989
- Crews, K.M., Buchanan, J.A., Barker, M.K.* and Tuncay, O.C. Compression and Tension Effects on Osteoblast Proliferation. *J Dent Res*, Special Issue, 1990
- Phipps, L.*, Hodge, J., Holmes, J., Barker, M., Tuncay, O., and Buchanan, J.: Examination of FTIC-Phenytoin Binding to Human Gingival Fibroblasts. *J Dent Res*, Special Issue, 1991

- Holmes, J.*, Hodge, J., Barker, M., Buchanan, J., and Tuncay, O.: Mechanically Perturbed PDL Fibroblast Effects on Osteoblasts. *J Dent Res*, Special Issue, 1991
- Guillot, W.*, McFarland, M., Barker, M., Buchanan, J., and Tuncay, O.: Growth Stimulating Activity in Contracted Phenytoin-Sensitive Gingival Fibroblasts. *J Dent Res*, Special Issue, 1991
- Hodge, J.*, Holmes, J., Barker, M., Tuncay, O., and Buchanan, J.: Technique Effects on the Phenytoin Binding Kinetics of Gingival Fibroblasts. *J Dent Res*, Special Issuse, 1991
- McFarland, M.*, Guillot, W., Barker, M., Buchanan, J., and Tuncay, O.: Gingival Fibroblast Contraction with Phenytoin and Cyclosporin-A. J Dent Res Special Issue, 1991
- Barker M, Ho, D.*, and Tuncay, O.: Metabolic Response of Osteoblasts to Varying Oxygen Tensions. J Dent Res Special Issue, 1992
- Atkins, S.* and Tuncay, O.: Toothbrushing Effects on Human Gingival Blood Flow. *J Dent Res*, Special Issue, 1992
- Holmes, J.*, Barker, M., Walley, K. and Tuncay, O.: Cytotoxicity of Neon-Colored Orthodontic Elastics. *J Dent Res*, Special Issue, 1992
- Hodge, J.*, Holmes, J., Capra, N. and Tuncay, O.: An Animal Model to Study Chronic Pain in the Masticatory Apparatus. *J Dent Res*, Special Issue, 1992
- Ho, D.*, Barker, M. and Tuncay, O.: Ambient Oxygen Tension Modulates Osteoblast Metabolism. *AAO-Annual Session*, St. Louis, MO 1992
- Holmes, J.*, Walley, K. and Tuncay, O.: Cytotoxicity of Neon-Colored Orthodontic Elastics. *AAO-Annual Session*, St. Louis, MO 1992
- Hodge, J.*, Holmes, J. and Tuncay, O.: An Animal Model to Study Chronic Pain in the Masticatory Apparatus. *AAO-Annual Session*, St. Louis, MO 1992
- Rushing, E.*, Silberman, S. Meydrech, E. and Tuncay, O.: Dentists' Perception of Orthodontic Treatment Effects on Profile. *J Dent Res*, Special Issue, 1993
- Rushing E.*, Silberman S. Meydrech E. and Tuncay O: Dentists' Perception of Orthodontic Treatment Effects on Profile. *AAO-Annual Session*, Toronto, Canada, 1993

- Tewari M, Taub R, Newton RC, Tuncay OC, Tewari DS: DGLA suppresses IL-1 stimulated gingival collagenase gene transcription. *Mol Biol of the Cell* (S)6:172, 1995
- Tewari M, Taub R, Newton RC, Tuncay OC, Tewari DS: Nutritional element regulation of gingival collagenase gene expression. *Mol Biol of the Cell* (S)6:172,1995
- Tuncay O.* Tewari M and Tewari D: Expression of Genes in the Gingival Fibroblast Associated with Tissue Remodeling Upon Ultrasound Perturbation. J Dent Res Special Issue, 1996
- Zaghi F.* Bloch P, Schleyer, T and Tuncay, O: Fractal Analysis of Alveolar Bone Trabecular Microarchitecture During Active Tooth Movement. *J Dent Res Special Issue*, 1996
- Tewari M* Tuncay O, Reddy R, Newton R, Taub R and Tewari D: Nutritional Regulation of Collagenase Gene Expression. *J Dent Res Special Issue*, 1996
- Tewari D* Tuncay O, Reddy P, Newton R, Taub R and Tewari M: Spectrum of IL-1 Inducible Genes in Human Gingival Fibroblasts. *J Dent Res*, Special Issue, 1996
- Kolokitha OG, Athanasiou AE* and Tuncay OC: Validity of Computerized Cephalometric Prediction of Profile Changes After Orthognathic Surgery. 72nd Congress of the European Orthodontic Society, 1996
- Tuncay OC*, Tewari M and Tewari D: Ultrasound Stimulation of Remodeling Periodontal Tissues. Program and Abstracts, VI International Symposium of Dentofacial Development and Function, 1996
- Kolokitha OE, Athanasiou AE and Tuncay OC. Validity of Computerized Cephalometric Prediction of Profile Changes After Orthognathic Surgery. Program and Abstracts, VI International symposium of Dentofacial Development and Function, 1996
- Tuncay O*, Michman A, D'Avanzo R, Tewari M, Reddy P and Tewari D:
 Morphogenic and Apoptotic Gene Expression Upon Mechanical and
 Ultrasound Perturbation in the Chondrocyte, *J Dent Res*, Special Issue, 1997
- Reddy PJ, Tewari M, Reddy CD, Taub R, Tuncay O, Newtown R and Tewari D. Inhibition of collagenase gene expression by dexamethasone. *J Dent Res*, Special Iss 76:52, 1997

<u>Curriculum Vitae</u>: Orhan C. Tuncay Page 34 of 34

- Tewari M, Reddy PJ, Reddy CD, Taub R, Tuncay O, Newton RC and Tewari D. Activation of gingival collagenase gene expression by c-fos and c-jun. *J Dent Res*, Special Issue76:376, 1997
- Guajardo G, Pizza S, Bloch P, Tuncay O. Ultrasound effects on alveolar bone fractal dimension during orthodontic tooth movement. *J Dent Res* 1998;77:special issue B
- Tuncay O* Husain A, Vinson B, Hamid Q, Tewari D. Gene expression in osteoblasts and gingival fibroblasts subjected to ultrasound perturbation. *J Dent Res* 1998;77:special issue B
- Tewari DS, Hamid QA, Vinson BD, Tewari M, Tuncay OC. The effects of IL-1 and ultrasound perturbation on the expression of NFkB genes in human osteoblasts and gingival fibroblasts in vitro. *J Dent Res* 1998;77:special issue
- Hamid QA, Tewari M, Majumdar A, Tuncay OC, Tewari DS. TNF mediated programmed cell death in Human gingival fibroblasts. *J Dent Res* 1998;77:special issue
- Tewari M, Hamid QA, Usmani S, Tuncay OC, Tewari DS. The induction of human gingival collagenase expression by ornithine decarboxylase and polyamines. *J Dent Res* 1998;77:special isse
- Uematsu S J Dent Res 2001;:special isse
- Koumpia, E, Straja S, Tuncay OC. Invisalign effectiveness with experience. *WFO program and abstracts*. Paris, 2005.

Inventions & Patents

"System and Method of Digitally Modeling Craniofacial Features for the Purposes of Diagnosis and Treatment Predictions" US 6,879,712,B2 Apr. 12, 2005